

**STATE FOREST LAND
ENVIRONMENTAL CHECKLIST**

Purpose of Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can. Highlighted questions are supplemental to the standard SEPA checklist. These questions look at the proposed project in relationship to the surrounding landscape. Adjacency and landscape/watershed-administrative-unit (WAU) maps for this proposal are available on the DNR internet website at <http://www.wa.gov/dnr/> under "SEPA Center." These maps may also be reviewed at the DNR regional office responsible for the proposal. This checklist is to be used for SEPA evaluation of state forest land activities.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later. All of the questions are intended to address the complete proposal as described by your response to question A-11. The proposal acres in question A-11 may cover a larger area than the attached forest practice application acres, or the actual timber sale acres.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

Timber Sale Name: **Wahkiacus Thinning** Agreement #: **30-076130**
2. Name of applicant: **Department of Natural Resources**
3. Address and phone number of applicant and contact person: **John Haddon, 713 Bowers Rd, Ellensburg WA 98926 Phone (509) 925-8510**
4. Date checklist prepared: **07/13/2004**
5. Agency requesting checklist: : **Department of Natural Resources**
6. Proposed timing or schedule (including phasing, if applicable):

a. Auction Date: **Winter 2005**

b. Planned contract end date (but may be extended): **Fall 2006**

c. Phasing: **None**
7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

Timber Sale

- a. Site Preparation: **Area will be evaluated for ground scarification with dozer.**
- b. Regeneration Method: **Hand plant regeneration units with ponderosa pine, 250 trees/acre.**
- c. Vegetation Management: **Spot spray chemical application of areas not scarified for competing vegetation around seedlings in accordance with Department policites.**
- d. Thinning: **On-going assessments for stocking control.**

Roads: **New construction of 330', re-construction of 490', abandonment of 2,580' and 18,300' of existing roads will have maintenance during the operation.**

Rock Pits and/or Sale: **Extraction of 220 cubic yards of pit run rock from an existing State pit located in NW¼NE¼ Section 23, Township 5 North, Range 13 East.**

Other: **None**

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.
- ☐ 303(d) – listed water body in WAU: ☐ temp. ☐ sediment ☐ completed TMDL (total maximum daily load):

☐ Landscape plan:

☐ Watershed Analysis

☐ Interdisciplinary team (ID Team) report:

☒ Road design plan:

☒ Wildlife report:

☐ Geotechnical report:

☐ Other specialist report(s):

☐ Memorandum of understanding (sportsmen’s groups, neighborhood associations, tribes, etc.):

☐ Rock pit Plan:

☒ Other: **Forest Resource Plan, Environmental Impact Statement (EIS) adopted July 31st, 1992; State Soils Survey; the Department of Natural Resource Habitat Conservation Plan (HCP), adopted January 30th, 1997 and Amendment #1, adopted April 2004; February 21, 2003, Road Maintenance and Abandonment Plan (RMAP)**
9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. **No**
10. List any government approvals or permits that will be needed for your proposal, if known.
- ☐ HPA ☒ Burning permit ☐ Shoreline permit ☒ Incidental take permit ☒ FPA **2703052** ☐ Other:
11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

Complete proposal description: **The Wahkiacus Thinning Timber Sale began as a combination shelterwood/partial cut thinning of one unit totaling 394 acres. The initial prescription was then modified to thin 259 acres in one unit and have four regeneration cut units totaling 135 acres. A minor amount of new road construction, reconstruction and road maintenance will be needed for this proposal (refer to B 11.c.) The timber harvest will be accomplished by using ground skidding equipment. On each side of Type 5 streams a 30' Equipment Limitation Zone (ELZ) will exist allowing only 10% ground disturbance within this zone. Other measures will also be used to protect the quality and quantity of water (see 3.B.3.). Under the Department of Natural Resources Habitat Conservation Plan (HCP) this area is being managed as No Role.**

Geographically the timber sale is located approximately 21 miles northeast of Lyle and 3.5 miles north of Klickitat, Washington a rural community of approximately 100 residences. In the area surrounding the proposal are approximately 15 residences. The Wahkiacus Heights county road cuts through the center of the proposal. Residential commuting varies from 8-12 vehicles per day through the proposal. Six private property owners are adjacent to the proposal on the west, south and southeast sides, the Department of Wildlife on the northeast side and DNR to the north. An extreme hazard abatement plan is required for the area along the Wahkiacus County Road and within 500’ of any structure. Recreation in the area is predominantly hunting.

The Klickitat River (Type 1 water, classed as a wild scenic river) is approximately 2,900’ northeast of the proposal. The river is down slope 3,240’. The timber sale is situated on a plateau above the river at 2,120’ elevation. The Klickitat River is a popular drift boat fishing water.

a. Timber stand description pre-harvest (include major timber species and origin date), Type of harvest, overall unit objectives.
The timber stand’s components consist of Douglas fir as the primary species with lesser amounts of ponderosa pine and Oregon white oak. Age of the stand is 85 years old, 9.1" average DBH, an average of 250 stems/acre, 123 basal area/acre, 13MBF/acre, and a relative density of 40. Species composition is 85% Douglas fir, 10% ponderosa pine, 5% Oregon White oak. The plant association favors Douglas fir/Elksedge. The shrub layer is mixture of tall and low shrubs, grasses and a few herbs.

This area is typical of many east side timber stands where aggressive fire suppression efforts have changed the stands structure. The structure has changed from a climax stand to an early to mid seral stand. The former being characterized by Douglas fir and ponderosa pine with a more open to marginally closed canopy and representing all age classes, as to one of a more uniform age and size with a closed forest canopy and with Douglas fir as the primary species. The stand is characterized with densely overstocked patches of Douglas fir (250-650 trees per acre (tpa)) interspersed with small pockets (1/4-2 acres) of Oregon white oak and ponderosa pine with older Douglas fir remnants (>40 dbh) scattered throughout the stand. No trees 160 years of age or older will be harvested. In addition no trees larger than 26” dbh will be harvested.

Stand history: stand origin 1919 with some scattered remnants going back to the late 1600’s. Prior harvest took place in 1979 and 1989 with emphasis on removing the large overstory fir and pine with a light thinning in the understory.

Management goals are to manage this stand as an even-aged forest, stimulate tree growth, improve and sustain forest health, reduce the fuel loading to decrease the risk of catastrophic forest fire, recover volume that will be lost due to the over stocked condition, protect a state threatened species and enhance its habitat, and increase the net revenue gain at the final harvest.

The silviculture prescription to manage this stand will be a partial cut design on one unit of 259 acres. Regeneration harvest units of 36, 66, 20 and 13 acres will also occur. Thinned areas will have 50 tpa left while on regeneration cuts 9-15 tpa will remain. Leave trees in all units are marked with orange paint. Western Gray Squirrel habitat will be maintained by leaving all Oregon white oak where it is operationally feasible, thinning of conifer will occur around the larger oak (>14 dbh) to promote a growth release. Future plans for the proposal will be to manage stocking control in younger stands and assess thinned areas for regeneration harvests.

Due to the overstocked condition and age of the stand the majority of trees are in a suppressed growth condition and will not benefit from thinning. Since the area has a healthy population of Western Gray Squirrels (a state threatened species) on site it is prudent to defer some areas from a regeneration harvest and treat them with a thinning. In openings where previous logging activities occurred Douglas fir and ponderosa pine regeneration have restocked these areas. In areas of suppressed growth the partial cut design will provide some open space for natural regeneration to occur. This will help accelerate regeneration into these areas.

The focus of the prescription is to remove the overstory where the stand is under-stocked or suppressed and experiencing a stagnant state of growth condition. Thin overstocked areas that will benefit from less competition using a partial cut design in areas deferred for a final harvest.

b. Road activity summary. See also attached forest practice application (FPA) for maps and more details.

New road construction, reconstruction and road maintenance will be needed for the project.

Type of Activity	How many	Length (feet) (estimated)	Acres (estimated)	Fish Barrier Removals (#)
Construction		330	.1	0
Reconstruction		490		0
Maintenance		18,300		0
Abandonment		2580	0	0
Bridge Install/Replace	0			0
Culvert Install/Replace (fish)	0			0
Culvert Install/Replace (no fish)	0			

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. (See attached timber sale map. See also color landscape/WAU map on DNR website <http://www.wa.gov/dnr/> under “SEPA Center.”)

a. Legal description: **Section 36, Township 5 North, Range 13 East, in Klickitat County.**

b. Distance and direction from nearest town (include road names): **Geographically the timber sale is located approximately 21 miles northeast of Lyle, Washington. From State Hwy 141 at Lyle, Washington take Hwy 142 16.7 miles to the Wahkiacus Heights county road then travel 4.4 miles to the site.**

c. Identify the watershed administrative unit (WAU), the WAU Sub-basin(s), and acres. (See also landscape/WAU map on DNR website <http://www.wa.gov/dnr/> under “SEPA Center”)

WAU Name	WAU Acres	Proposal Acres
Skookum	52,020	394

13. Discuss any known future activities not associated with this proposal that may result in a cumulative change in the environment when combined with the past and current proposal(s). (See digital ortho-photos for WAU and adjacency maps on DNR website <http://www.wa.gov/dnr/> under “SEPA Center,” for a broader landscape perspective.)

The proposal is located in the Skookum (#300521) Watershed Analysis Unit (52,020 acres). According to the DNR GIS Forest Practice Application database as of 08/2/04, in the past seven years, there has been approximately 11,501 acres of timber harvested within this WAU. By Forest Practice definition, 5,545 acres have been even-age harvested and 5,602 acres have been uneven-age harvested. Of the total DNR lands harvested in the WAU, seven acres were even-age harvested and 1,431 acres were uneven-age harvested. The timber in this WAU is dominated by 80 to100 year old trees. The WAU is experiencing forest health effects from overstocking, aggressive fire suppression, and past management activities.

One mile north of this proposal is the State’s North Beeks Timber Sale, a partial cut of approximately 1108 acres that is in its beginning stage of harvest activity. In addition, there are several large industrial landowners in the WAU that have completed both regeneration and thinning harvest in the past 5-10 years.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (check one):

☒ Flat, ☐ Rolling, ☐ Hilly, ☐ Steep slopes, ☐ Mountainous, ☐ Other:

- 1) General description of the WAU or sub-basin(s) (landforms, climate, elevations, and forest vegetation zone).
The WAU is generally flat with steeper slopes along the edge of drainages, aspect favors southeast. The elevation range is 463 - 3,757'. The annual rainfall average is 27 inches. The WAU contains a total land base of 52,020 acres. Department of Natural Resources land consists of 6,219 acres or 12% of the land base. Sixty-one percent of the WAU is in the peak rain on snow zone. The timber type is dominated by Douglas fir, ponderosa pine, Oregon white oak, and grand fir.
- 2) Identify any difference between the proposal location and the general description of the WAU or sub-basin(s).
Elevation range is 2,120-2,200, 100% of the proposal is in the rain-on-snow zone and the average slope is 9%.

b. What is the steepest slope on the site (approximate percent slope)? **20% slope on less than 5% of the timber sale area.**

c. What general Types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland. Note: The following table is created from state soil survey data. It is a roll-up of general soils information for the soils found in the entire sale area. It is only one of several site assessment tools used in conjunction with actual site inspections for slope stability concerns or erosion potential. It can help indicate potential for shallow, rapid soil movement, but often does not represent deeper soil sub-strata. The actual soils conditions in the sale area may vary considerably based on land-form shapes, presence of erosive situations, and other factors. The state soil survey is a compilation of various surveys with different standards.

State Soil Survey #	Soil Texture	% Slope	Acres	Mass Wasting Potential	Erosion Potential
8082	TIGIT LOAMY	2-8	14	NO DATA	LOW-MEDIUM
8242	TIGIT LOAMY	8-15	120	NO DATA	LOW-MEDIUM
1603	DALIG LOAMY	2-8	140	NO DATA	LOW-MEDIUM
2553	GUNN STONY LOAM	5-30	70	NO DATA	MEDIUM
1745	DALIG LOAM	8-15	50	NO DATA	LOW-MEDIUM

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.
No.
- 1) Surface indications:

2) Is there evidence of natural slope failures in the sub-basin(s)?
☒ No ☐ Yes, Type of failures (shallow vs. deep-seated) and failure site characteristics:

3) Are there slope failures in the sub-basin(s) associated with timber harvest activities or roads?
☒ No ☐ Yes Type of failures (shallow vs. deep-seated) and failure site characteristics:
Associated management activity:

4) Is the proposed site similar to sites where slope failures have occurred previously in the sub-basin(s)?
☒ No ☐ Yes, describe similarities between the conditions and activities on these sites:

5) Describe any slope stability protection measures (including sale boundary location, road, and harvest system decisions) incorporated into this proposal.

1. New road construction location, focused on re-locating a stream adjacent road.

2. All roads are designed to divert water to the forest floor to eliminate the risk of erosion: road stream crossings will be rocked, out sloped and have driveable water bars.

3. Skid trails will be water barred at the completion of each setting on slopes over 10% or where needed.
- e. Describe the purpose, Type, and approximate quantities of any filling or grading proposed. Indicate source of fill.
Approx. acreage new roads: **.1** Approx. acreage new landings: **2.7** Approx. acreage rock pit fills: **None** Fill source: **N/A**
- e. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. **All harvest activities have been designed to mitigate the risk of any erosion.**
- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?
Approximate percent of proposal in permanent road running surface (includes gravel roads): **None**
- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:
(Include protection measures for minimizing compaction or rutting.)

1. All drainage structures will be maintained in an operable state during and after harvest operations.

2. Roads are designed and will be maintained to divert water to the forest floor to eliminate the risk of erosion: road stream crossings will be rocked, out sloped and have drive-able water bars.

3. During operations these restrictions will apply.

a. Skid trail and landing locations will be approved by the contract administrator.

b. Excessive skid trail damage will not be permitted.

4. A 30' ELZ on each side of Type 5 streams will be in effect, allowing only 10% ground disturbance within this zone.

5. Abandonment of 2,250' of existing roads.

6. Skid trails will be water barred at the completion of each setting on slopes over 10% or where needed.

2. Air

- a. What Types of emissions to the air would result from the proposal (i.e., dust from truck traffic, rock mining, crushing or hauling, automobile, odors, industrial wood smoke) during construction and when the project is completed?
If any, generally describe and give approximate quantities if known.
Minor amounts of exhaust and road dust will be created during the operation. Smoke from slash burning.
- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. **None**
- c. Proposed measures to reduce or control emissions or other impacts to air, if any:
If burning is done, a burn permit will be required and all burning will be subject to the smoke management regulations.

3. Water

- a. Surface:
- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe Type and provide names. If appropriate, state what stream or river it flows into. (See attached timber sale map and forest practice base maps.)

a) Downstream water bodies: **Klickitat River is .6 miles downstream the proposed timber sale.**

b) Complete the following riparian & wetland management zone table:

Wetland, Stream, Lake, Pond, or Saltwater Name (if any)	Water Type	Number (how many?)	Avg RMZ/WMZ Width in Feet (per side for streams)
Klickitat River tributaries	5	4	30 ELZ

c) List RMZ / WMZ protection measures including silvicultural prescriptions, road-related RMZ/ WMZ protection measures, and wind buffers.

1.

The thinning prescription is designed to leave an average of 50 tpa. In regeneration cuts 9-15 tpa will remain after harvest.
2.

All Type 5 streams within the proposal will be protected by a 30’ ELZ, where only 10% ground disturbance will be allowed.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

☐No ☒Yes (See RMZ / WMZ table above and attached timber sale map.)

Description (include culverts): **Ground based machinery will be allowed to operate next to a Type 5 water but only 10% ground disturbance within 30’ of these streams will be allowed.**

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material. **None**

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. (Include diversions for fish-passage culvert installation.)

☒ No ☐Yes, description:

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

☒ No ☐Yes, describe location:

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the Type of waste and anticipated volume of discharge.

☒ No ☐Yes, Type and volume:

7) Does the sub-basin contain soils or terrain susceptible to surface erosion and/or mass wasting? What is the potential for eroded material to enter surface water? **GIS soil report of the Skookum WAU and the Swale sub-basin landscape shows the potential for soil erosion with 20 % high, 53% medium, 6% low, 8% no data, and 13% N/A. Mass wasting potential is 5% high, 10% medium, 10% low, 62% insignificant, and 13% no data.**

This proposal is in an area that has 18% medium and 82% low-medium erosion potential range. Soil characteristics are typed as all stable when disturbed. No data is available for mass wasting potential. Logging systems will be designed to minimize soil disturbance and measures to prevent erosion will be used in all phases of the harvest activities and after harvest activities are completed.

8) Is there evidence of changes to the channels in the WAU and sub-basin(s) due to surface erosion or mass wasting (accelerated aggradations, erosion, decrease in large organic debris (LOD), change in channel dimensions)?

☒ No ☐Yes, describe changes and possible causes:

9) Could this proposal affect water quality based on the answers to the questions 1-8 above.

☒ No ☐Yes, explain:

No adverse affects on quality or quantity of water in sub-basin area are anticipated from the proposed activities.

10) What are the approximate road miles per square mile in the WAU and sub-basin(s) **2.7 miles per square mile.**

Are you aware of areas where forest roads or road ditches intercept sub-surface flow and deliver surface water to streams, rather than back to the forest floor?

☒ No ☐Yes, describe:

11) Is the proposal within a significant rain-on-snow (ROS) zone? If not, **stop here** and go to question B-3-a-13 below. Use the WAU or sub-basin(s) for the ROS percentage questions below.

☐No ☒Yes, approximate percent of WAU in significant ROS zone: **Within the WAU 61% of the landscape is in the peak rain on snow zone.**

Approximate percent of sub-basin(s): **Data not available**

12) If the proposal is within the significant ROS zone, what is the approximate percentage of the WAU or sub-basin(s) within the significant ROS zone (all ownerships) that is(are) rated as hydrologically mature?

Hydrologically Mature in Rain-on-Snow zone:
40 acres (0%) of mature forest land in the WAU.
20,564 acres (65%) of moderate mature forest land in the WAU.
6,621 acres (21%) of other forestland in the WAU.
3,909 acres (12%) of immature forestland in the WAU.
279 acres (1%) of non-forested land in the WAU.

13) Is there evidence of changes to channels associated with peak flows in the WAU or sub-basin(s)?

☒ No ☐Yes, describe observations:

14) Based on your answers to questions B-3-a-10 through B-3-a-13 above, describe whether and how this proposal, in combination with other past, current, or reasonably foreseeable proposals in the WAU and sub-basin(s), may contribute to a peak flow impact. **There is no evidence that this proposal will contribute to runoff problem. However, water flows may increase slightly during low periods due to decreased transpiration and interception.**

15) Is there a water resource (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or downslope of the proposed activity that could be affected by changes in surface water amounts, quality, or movements as a result of this proposal?

☒No ☐Yes Possible impacts:

16) Based on your answers to questions B-3-a-10 through B-3-a-15 above, note any protection measures addressing possible peak flow/flooding impacts. **See B.1.h.**

b. Ground Water:

- 1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known. **No**
- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve. **Does not apply**
- 3) Is there a water resource use (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or down slope of the proposed activity that could be affected by changes in groundwater amounts, timing, or movements as a result of this proposal?

☒ No ☐ Yes, describe

a) Note protection measures, if any.

c. Water Runoff (including storm water):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe. **Storm water and seasonal snowmelt will be channeled from roads and skid trails by out sloped roads, and water bars that divert water to the forest floor. This water will not flow directly into other waters.**
- 2) Could waste materials enter ground or surface waters? If so, generally describe. **Some logging slash may enter streams.**

a) Note protection measures, if any. **Directional felling of timber away from streams will be required. Landings will be located where logging residue by-products will not be delivered to streams.**

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

See surface water, ground water, and water runoff sections above, questions **See B-3-c-1-2, B 1 h**

4. **Plants**

a. Check or circle Types of vegetation found on the site:

- ☒ deciduous tree: ☐ alder, ☒ maple, ☐ aspen, ☐ cottonwood, ☐ western larch, ☐ birch, ☒ other: **scouler willow and Oregon white oak**
- ☒ evergreen tree: ☒ Douglas-fir, ☒ grand fir, ☐ Pacific silver fir, ☒ ponderosa pine, ☐ lodgepole pine, ☐ western hemlock, ☐ mountain hemlock, ☐ Englemann spruce, ☐ Sitka spruce, ☐ red cedar, ☐ yellow cedar, ☐ other:
- ☒ shrubs: ☐ huckleberry, ☐ salmonberry, ☐ salal, ☒ other: **California hazelnut, oceanspray, creeping black berry, wood rose, common snowberry, dwarf Oregon grape and red stem ceanothus.**
- ☒ grass
- ☐ pasture
- ☐ crop or grain
- ☐ wet soil plants: ☐ cattail, ☐ buttercup, ☐ bullrush, skunk cabbage, ☐ devil's club, ☐ other:
- ☐ water plants: ☐ water lily, ☐ eelgrass, ☐ milfoil, ☐ other:
- ☒ other Types of vegetation: **Herbs: rattlesnake plantain, yarrow, broad petal strawberry.**
- ☐ plant communities of concern:

b. What kind and amount of vegetation will be removed or altered? (See answers to questions A-11-a, A-11-b, B-3-a-1-b and B-3-a-1-c. The following sub-questions merely supplement those answers.) **See B.4.b.2. below.**

- 1) Describe the species, age, and structural diversity of the timber Types immediately adjacent to the removal area. (See landscape/WAU and adjacency maps on the DNR website <http://www.wa.gov/dnr/> under "SEPA Center".) **To the north of the proposal are 80 year old Douglas fir and ponderosa pine; to the east 60-150 year old Douglas fir and ponderosa pine; to the west 70 year old Douglas fir and ponderosa pine; and to the south 85 year old Douglas fir.**
- 2) Retention tree plan:
 1. **This sale has been designed to leave dominant and co-dominant Douglas fir and ponderosa pine (average 12.3" dbh). All Oregon white oak will be retained (where it is operationally feasible).**
 2. **This proposal is harvesting an average of 80 tpa in the thinning and regeneration cuts. This proposal will leave on average of 50 tpa in the thinning and 9-15 tpa in regeneration cuts.**
 3. **Snags and down woody debris will be retained except where safety concerns exist or operational access is needed.**

c. List threatened or endangered plant species known to be on or near the site. **None**

d. Proposed landscaping use of native plants, or other measures to preserve or enhance vegetation on the site, if any. **Does not apply**

5. **Animals**

a. Circle or check any birds and animals or unique habitats which have been observed on or near the site or are known to be on or near the site:

- birds: ☒ hawk, ☐ heron, ☐ eagle, ☒ songbirds, ☐ pigeon, ☐ other:
- mammals: ☒ deer, ☒ bear, ☒ elk, ☐ beaver, ☒ other: **western gray squirrels**
- fish: ☐ bass, ☐ salmon, ☐ trout, ☐ herring, ☐ shellfish, ☐ other:
- unique habitats: ☐ talus slopes, ☐ caves, ☐ cliffs, ☒ oak woodlands, ☐ balds, ☐ mineral springs

b. List any threatened or endangered species known to be on or near the site (include federal- and state-listed species. **A status 1 spotted owl (#992, Beeks Canyon) is located 1.8 miles north of the proposal. This is an occupied owl site and the harvest is consistent with the DNR's Amended HCP (2004).**

The Western Gray Squirrel (WGS) is on site. This proposal has been reviewed on the ground by biologists from Washington Department of Fish and Wildlife, Yakama Nation and SE Region. Their recommendations have been incorporated into the proposal – increasing leave trees around WGS nest sites, retaining all Oregon white oak (where it is operationally feasible) and all trees >26 dbh. In addition, the larger oak (>14 dbh) will have the conifer thinned around it to promote a growth release. Western Gray Squirrel habitat will be maintained.

- c. Is the site part of a migration route? If so, explain. **Yes**
☒ Pacific flyway ☐ Other migration route: Explain if any boxes checked: **This is part of the Pacific Flyway migration route but is not used extensively by waterfowl.**
- d. Proposed measures to preserve or enhance wildlife, if any: **This proposal is harvesting an average of 80 tpa. This proposal will leave on average of 50 tpa. Snags and down woody debris will be retained except where safety concerns exist or operational access is needed. All known western gray squirrel nest trees will be retained. In addition to this all type A nests will have a 50’ no entry buffer and within 400’ of the nest tree and the no entry boundary 50% of the forest canopy will be retained. There will also be a harvest activity restriction during the breeding season. Vegetation screens will be maintained between the county road and Unit #4 to protect wildlife. Abandonment of 2,250’ of existing roads. All Oregon white oak will be left where its operationally feasible and all trees >26 inch dbh.**
- 1) Note existing or proposed protection measures, if any, for the complete proposal described in question A-11.
- | | |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Species/Habitat: Mammals/Birds | Protection Measures: All dominant and older trees (>26 dbh) have been left.. See also 4.b.2.1-4 |
| Species/Habitat: Western Gray Squirrel | Protection Measures: Thinning will enhance habitat conditions for the western gray squirrel where over-stocking exists leaving all Oregon white oaks and favoring re-stocking of ponderosa pine. See B.5.d. above. |

6. **Energy and Natural Resources**

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc. **Does not apply**
- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. **Does not apply**
- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any: **Does not apply**

7. **Environmental Health**

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so describe. **None**
- 1) Describe special emergency services that might be required. **The area covered by proposal pays forest patrol assessment to the DNR for wildfire suppression.**
- 2) Proposed measures to reduce or control environmental health hazards, if any: **Does not apply**
- b. Noise
- 1) What Types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? **None**
- 2) What Types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site. **Logging equipment as well as log trucks will create noise during mostly daylight hours during the operating period of the project.**
- 3) Proposed measures to reduce or control noise impacts, if any: **None**

8. **Land and Shoreline Use**

- a. What is the current use of the site and adjacent properties? (Site includes the complete proposal, eg. rock pits and access roads.) **Forest Management**
- b. Has the site been used for agriculture? If so, describe. **No**
- c. Describe any structures on the site. **None**
- d. Will any structures be demolished? If so, what? **No**
- e. What is the current zoning classification of the site? **Forest Resource Zone**
- f. What is the current comprehensive plan designation of the site? **Forestry**
- g. If applicable, what is the current shoreline master program designation of the site? **Does not apply**
- h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify. **No**
- i. Approximately how many people would reside or work in the completed project? **Does not apply**
- j. Approximately how many people would the completed project displace? **Does not apply**
- k. Proposed measures to avoid or reduce displacement impacts, if any: **Does not apply**

- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: **Long term forest management will continue.**

9. **Housing**

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. **Does not apply**
- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. **Does not apply**
- c. Proposed measures to reduce or control housing impacts, if any: **Does not apply**

10. **Aesthetics**

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed? **Does not apply**
- b. What views in the immediate vicinity would be altered or obstructed? **None**

- 1) Is this proposal visible from a residential area, town, city, developed recreation site, or a scenic vista?
☒ No ☐ Yes, viewing location:
- 2) Is this proposal visible from a major transportation or designated scenic corridor (county road, state or interstate highway, US route, river, or Columbia Gorge SMA)?
☐ No ☒ Yes, scenic corridor name: **Wahkiacus county road**
- 3) How will this proposal affect any views described in 1) or 2) above?
The northeast boundary of Unit #2, a 33 acre regeneration cut, is located along the edge of the plateau above the river and is not visible from the river. Along the Wahkiacus road this is a partial cut and a 20 acre regeneration harvest (Unit #3). Unit #3 will have 1000’ of county road frontage. Unit #4 has 2000’ of county road frontage. As requested by Klickitat County Road Dept, any trees in the county road right of way will be removed with this proposal to provide for future road realignment.

- c. Proposed measures to reduce or control aesthetic impacts, if any: **See above. Adjacent to the county road for 100 feet on both sides in Unit #1, the leave trees are marked on the backside of the tree opposite to the road to keep the stand looking natural. Unit #4 has deciduous vegetation was retained as a screen between road use and wildlife.**

11. **Light and Glare**

- a. What Type of light or glare will the proposal produce? What time of day would it mainly occur? **Does not apply**
- b. Could light or glare from the finished project be a safety hazard or interfere with views? **Does not apply**
- c. What existing off-site sources of light or glare may affect your proposal? **None**
- d. Proposed measures to reduce or control light and glare impacts, if any: **Does not apply**

12. **Recreation**

- a. What designated and informal recreational opportunities are in the immediate vicinity? **Hunting.**
- b. Would the proposed project displace any existing recreational uses? If so, describe: **Some disruption of hunting while timber harvest activities occur but these recreational uses could be resumed once the logging operation is completed.**
- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: **Signing to warn of hazards associated with timber harvest and truck traffic.**

13. **Historic and Cultural Preservation**

- a. Are there any places or objects listed on, or proposed for national, state, or local preservation registers known to be on or next to the site? If so, generally describe. **No**
- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site. **None known at this time.**
- c. Proposed measures to reduce or control impacts, if any:
(Include all meetings or consultations with tribes, archaeologists, anthropologists or other authorities.) **Any cultural resources identified during operations will then be protected from any disturbance through development and implementation of a site specific protection plan(s), developed by a professional Archaeologist which will be filed with the Office of Archaeology and Historic Preservation (OHAP).**

14. **Transportation**

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any. **The main haul route will use the Wahkiacus Heights county road, State Hwy 142 and State Hwy 14.**

- 1) Is it likely that this proposal will contribute to an existing safety, noise, dust, maintenance, or other transportation impact problem(s)? **There will be some temporary increase in log truck traffic and dust on gravel roads during the project.**

- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop? **No**
- c. How many parking spaces would the completed project have? How many would the project eliminate? **Does not apply**

- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private). **No**

1) How does this proposal impact the overall transportation system/circulation in the surrounding area, if at all? **There will be an increase in heavy truck traffic during the operational period of the timber harvest activities.**

- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. **No**
- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur. **Between 5 and 20 loads of logs per day during peak volumes of logging activities.**
- g. Proposed measures to reduce or control transportation impacts, if any: **None**

15. **Public Services**

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe. **Low risk need from forest fire suppression from Department of Natural Resources or emergency medical services.**
- b. Proposed measures to reduce or control direct impacts on public services, if any. **None**

16. **Utilities**

- a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other. **None**
- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed. **Does not apply**

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Completed by:	<div>STEVE DUGGER, District Forester</div>	Date:	<div>8/8/04</div>
Reviewed by:	<div>PETER T. STOCKS, District Manager</div>	Date:	<div></div>
	<div>JOHN HADDON, Management Forester</div>	Date:	<div></div>
Approved by:	<div>GEORGE B. SHELTON, Assistant Region Manager</div>	Date:	<div></div>